DAILY FIELD ACTIVITY REPORT

PROJECT NAME: Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site

DATE: April 11, 2018	**WEATHER:** Cloudy with intermittent wind and light to moderate rain, high ~55 degrees F

Personnel and Visitors Onsite:
Research vessel Cayuse - (no oversight representative) AECOM: Mark Tauscher; Geosyntec: Erin Dunbar; Gravity Marine: Ed Sloan, Peter Jenkins

Research vessel Tieton - CDM Smith: Julee Trump; AECOM: Nicky Moody; Geosyntec: Alison Clements; Gravity Marine: Rene Trudeau, John Schaefer

Survey vessel River Hawk - (no oversight representative) Geosyntec: Luke Smith; DEA: Jason Dorfman, David Moehl

Planned Activity:
- Collect surface sediment samples at stratified random sample locations near River Mile (RM) 4.
- Continue near shore bathymetric survey.

Activity Completed:
A tailgate safety meeting was led by AECOM, discussing the potential for combined sewer overflows with forecasted rain, and treating river water as contaminated, glove use, decontamination, properly securing supplies and equipment when stored for transport. Tailgate meeting was attended by all those listed above.

Julee Trump performed oversight of surface sediment sampling at random stratified locations on the west side of on the Willamette River from 08:00 to 18:10 on board the Tieton. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:
- 3-point composite surface sediment samples were collected from seven random stratified sampling locations between RM 4.5 and 5.2 East as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.
- Duplicate sample was collected (1 duplicate sample for every 20 primary samples).
- Rinsate Blank was collected for all sampling equipment including the grab sampler.

Julee Trump received updates from the Cayuse for surface sediment sampling through Geosyntec/AECOM as the Tieton had to dock for the day around 16:30 for an on-shore conference call. The following work was completed:
- 3-point composite surface sediment samples were collected from five random stratified sampling locations between approximately RM 4.3 and 4.8 West as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.
- An MS/MSD was collected at one of the five locations sampled (1 MS/MSD sample for every 20 primary samples).
- Rinsate Blank was collected for all sampling equipment including the grab sampler.

Status of Schedule & Priority Work:
- Random stratified sampling will continue through the week and into next week, progressing up the river.
- Locations on private property are being skipped until access agreements are obtained.
- AECOM/Geosyntec are looking for ways to increase efficiency with the sampling to stay on schedule. Efficiency implementations so far are focusing on work preparation and end of day activities.

Issues/Concerns/Resolutions (include work performed that was not planned or anticipated):
AECOM asked for clarification if locations at the BP Seaport dredging area should be sampled if they are in the dredge prism of an upcoming dredging operation. Two samples suspected of being within the dredge prism were skipped and AECOM will seek clarification from EPA if it would be desirable to use alternate locations.

AECOM/Geosyntec/Gravity have altered their GPS quality control procedures to take position checks at the piling at Fred Devine Diving and Salvage Dock each morning for each vessel and are no longer using the handheld GPS as a secondary QC check. CDM Smith advised that this is a deviation from the GPS procedures in the FSP. The FSP has provisions for modification of the GPS procedures during the initial two weeks of the sediment investigation. A revised SOP or change request for the modified GPS procedures needs to be provided to EPA for approval at the end of the week (April 13, 2018) for their review and approval. AECOM has acknowledged EPA's April 10, 2018 request for updates on the procedures for review and EPA approval.

AECOM/Geosyntec a discrepancy on the power grab bucket dimension that may have affected their recording of penetration depths on samples collected on the Tieton prior to morning of April 10, 2018. The power grab sampler bucket height is 4 cm higher than the 30 cm reference that they had been using as the penetration depth reference for samples. A resulting issue is that some grab samples collected on the Tieton prior to April 10, 2018 may under recorded the grab sample penetration depth by 4 cm. CDM Smith will draft email for EPA requesting verification of sample depths recorded on the Tieton prior to April 10, 2018.

Samples Collected, Measurements Made, Photographs: (List Locations, Matrix & Sample type):
On the Tieton, stratified random surface sediment samples were collected at following locations near RM 4 on the East side of the channel (see image below for location information):

- PDI-SG-B111-BL1 – Sandy silt
- PDI-SG-B113-BL1 – Sandy silt over black medium dense sand
- PDI-SG-B119-BL1 – Sandy silt, 4-6 total shrimp, trace organic sheen in overlaying water,
- PDI-SG-B123-BL1 – Sandy silt over black medium dense sand, trace gravel, trace organics.
- PDI-SG-B122-BL1 – Sandy silt over black medium dense sand, potato chip bag, live Myriophyllum-like plant (about 2 in tall), woody and organic debris, patches of green algae
- PDI-SG-B122-BL1-D – Duplicate of PDI-SG-B122-BL1
- PDI-SG-B126-BL1 – Silt over clayey silt, strong organic odor, trace organic sheen in overlaying water, shrimp
- PDI-SG-B136-BL1 – Silt, strong organic odor
- All samples were within the 25 FT sample location radius

On the Cayuse, stratified random surface sediment samples were collected at following locations near RM 4 on the East side of the channel (see image below for location information):

- PDI-SG-B105-BL1 – MS/MSD, lamprey (approximately 6-8 in long)
- PDI-SG-B107-BL1
- PDI-SG-B109-BL1
- PDI-SG-B118-BL1
- PDI-SG-B124-BL1
- All samples were stated to be within the 25 FT sample location radius

Near-shore bathymetric survey was progressed to RM 8 on the West bank and RM 6.4 on the East bank. No issues were encountered.

Photographs of work were taken throughout the day on board the Cayuse and provided to EPA via email. Additional photos were taken and archived with a description included in the photolog Excel spreadsheet, which are maintained electronically in the ProjectWise project folder.

Borings Completed (Include total footage drilled for each boring):
None

Wastes Generated and How Handled:

- Excess sediment and debris in the power grab sampler and in the sampling bowls was rinsed back into the river per the FSP.
- Disposable gloves, paper towels, and other general trash was containerized in a trash bag and removed daily for disposal to a municipal waste management dumpster.
- If trash was recovered and easily removed from the grab sampler, it was disposed of with general trash.

Health and Safety Issues, Equipment Needs, Staffing:
None, work conducted in accordance with the HASP and HASP addendum

Signature: Julee Trump **DATE** April 11, 2018

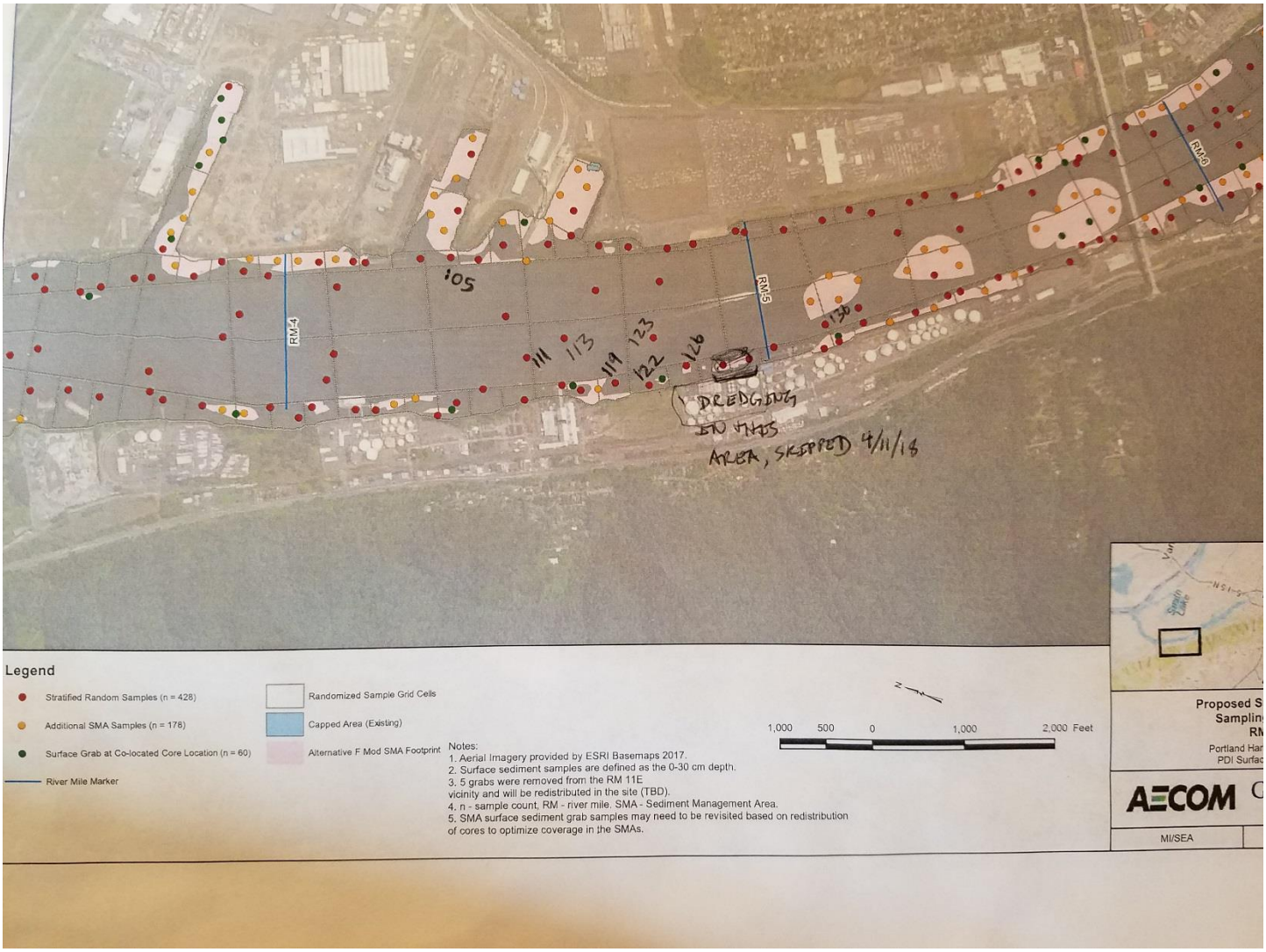

Figure 1: Field location notes